Re-inventing the Wheel Again

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Form Approved OMB No. 0704-0188 Transportation on a traditional battlefield is difficult and often viewed as the bane of a logistician existence. In insurgent style of warfare transportations is the Achilles' heel of any military operations. Other methods of transportation must be used in a counter insurgence style war like Iraq. These transportation methods do not have to be new, we can dust off old tried and true methods of aerial delivery and gun trucks and update them to suit today's battlefield.

The siege at Khe Sanh is thought of as the concept of aerial delivery's finest hour and seems to have set the precedence to be used only in emergency situations. Aerial delivery is broke down in to two categories, Helicopter Support Teams (HST) and Air Delivery. Helicopter support teams are used to sling loads of supplies or equipment beneath a helicopter for movement on a battlefield. Air delivery is best described as the means of delivering provisions and gear by aircraft to units on the ground by using parachutes.

The use of aerial delivery methods to re-supply Marines in combat is not a new concept and saw its baptism by fire in Vietnam in particular Operation DEWEY CANYON. Operation DEWEY CANYON was from 13 January 1969 to 4 March 1969 and was made possible by aerial delivery means. During the operation aerial revelry methods conducted: over 48-company size helicopter lifts (200-300 Marines) approximately 9,121 personnel, 22 battery size

or larger (six artillery pieces per battery), 1,533,597 pounds of cargo, and over 136,000 rounds of artillery with powder, made this operation a success.<sup>1</sup> The use of HST and air delivery in Vietnam was such importance as evident by General Frank Osmanski, Chief of Logistics, MACV.<sup>2</sup>

In a normal theater of operations such as Europe, one relies on the five means of transportations in priority... [sic] rail, road, pipeline, inland waterways, and finally air. But here, because of VC interdiction of surface means of transportations, we relay on them in reverse order - air first... [sic].

Since the Vietnam War air delivery techniques and have been updated. Examples included the Sherpa system and improved container delivery systems (CDS). The Sherpa system is based on square parachutes to control location of landings coupled with a global positioning system to "delver the loads to within a fifty meter circle of the drop zone center."

A limitation of the Sherpa system is that its can only be used with loads of 500 pounds or less. The Air Force is currently working on developing weather system pods to help

<sup>&</sup>lt;sup>1</sup> Capt John Clagnaz, Expeditionary Warfare School, Battlefield Study Operation DEWEY CANYON, October 2004.

<sup>&</sup>lt;sup>2</sup>General Frank Osmanski, Chief of Logistics, Military Army Command Vietnam, MAGTF Expeditionary Operations (Eastern Crescent) Practical Exercise Landing Support Operations E (E) 4312ANXA\_PE, Expeditionary Warfare School, 4312-A\_19

<sup>&</sup>lt;sup>3</sup> Eric Daniel, "UP IN THE SKY: Sherpa Guided Parachute Cargo System", 2004, http://www.military.com/news/UPINTHESKY/, 16 December 2004

adjust the parachute on the Container Delivery Systems (CDS) guidance systems to "detect, track, plot, wind speed, and direction of the wind to accurately delivery which can drop loads in excess of 2200 pounds." The new CDS system will allow loads of gear and supplies to be dropped within a unit's perimeter. With the development of the Sherpa and new CDS guidance systems will allow the Marine Corps to develop new techniques to supply Marines in combat.



Marine in the foreground and the locations of the load.)

Air delivery must be used and sold as a unique logistic capability within the MAGTF. The MAGTF can use air delivery, using Sherpa and the new CDS guidance system to re-supply forward combat service support areas (CSSA) just ahead of or

<sup>&</sup>lt;sup>4</sup> Dr. Steven Walker, "Precision Air Delivery Program", March 2001, http://www.afrlhorizons.com/Briefs/Mar01/osr0004.html.

<sup>5</sup> Eric Daniel, "UP IN THE SKY: Sherpa Guided Parachute Cargo System", 2004, http://www.military.com/news/UPINTHESKY/, 16 December 2004

right along the forward line of troops. Additionally, if sling loads are brought in via HST the amount of supplies and equipment at a CSSA can be rapidly built up more rapidly than ground transported supplies. Theses two techniques will not only maintain the momentum of the offensive operations but also change the dynamics of insurgent war in Iraq. Since the insurgents are targeting re-supply convoys show that U.S. Forces can be re-supplied in different means. Causing insurgents forces to expend their limited resources on ambushes that maybe waste of time, effort, and lead to morale problems within their ranks.

In Iraq, "protecting convoys is a top priority of U.S. commanders. Troops suffer about 100 casualties a month in insurgent attacks on convoys." Air delivery would reduce casualties and limit the enemy's success targeting re-supply convoys. Currently the U.S. Air Force has stated "that it will haul more supplies on its planes to help take some of the load off convoys". The Army and Air Force our looking to change the way provisions are provided to units and reduce convoys.

<sup>&</sup>lt;sup>6</sup> Chuck Crumbo, "S.C. Soldier Designs a New Truck," The State, 16
December 2004,

http://www.thestate.com/mld/thestate/news/10427810.htm?template=contentModule s/prints..., 9 January 2005.

<sup>&</sup>lt;sup>7</sup>Chuck Crumbo, "S.C. Soldier Designs a New Truck," The State, December 16, 2004,

http://www.thestate.com/mld/thestate/news/10427810.htm?template=contentModule s/prints..., 9 January 2005.



(A C-17 dropping CDS [Container

delivery System] bundles.)

The first step in this process would be to task a ground combat element unit to seize a landing zone or airfield in order to allow rapid replenishment of supplies. When a landing zone has been seized air delivery can start dropping supplies into the area to rapidly build up a combat service support area. This action will allow the Ground Combat Element (GCE) to retain the momentum of the attack and extended their operational culminating point.

Air delivery does pose a risk to aircraft and personnel. The use of air delivery and HST assets to establish logistics re-supply point will be audacious in nature forcing the enemy to rethink their concept of how the marine corps conducts offensive and counter insurgent operations. In United States Army publication FM 3-0 Operations Surprise, Concentration, Audacity

<sup>8</sup>Dr. Steven H. Walker, Precision Air Delivery Program, March 2001, http://www.afrlhorizions.com/Briefs/Mar01/OSR0004.html, 16 December 2004.

and Tempo (SCAT) are viewed as the keystone to any military operation and would be evident using Aerial Delivery to resupply Marines in combat. By employing the principals of SCAT and mix of re-supply by convoys with a sound military plan can help safe guard personnel and equipment involved in aerial delivery operations.

In addition to pulling aerial delivery techniques off the shelf, convoys need to have additional firepower organic to them to reply enemy attacks. War Wagons/ Gun Tracks are an old idea that should be dusted off and updated. "Credit for development of the convoy gun truck usually is given to the Army's 8th Transportation Group in 1967"10. War Wagons or Gun Trucks came into existence during the Vietnam War to counter Viet Cong ambush. Today in Iraq, like Vietnam, the enemy is limiting our re-supply efforts in order lower morale and fighting sprit. 11

The enemies of the United States have recognized that they cannot defeat the U.S. Military on a traditional or contiguous battlefield. They will strike a perceived critical vulnerability like re-supply convoys as evident in Col Liang and

 $<sup>^9\,\</sup>mathrm{Headquarters}$  , Department of the Army, FM 3-0 Operations, (Washington D.C., 2001), 176-204.

<sup>&</sup>lt;sup>10</sup> Paul S. Gardner, "Gun Trucks: Genuine Examples of American Ingenuity" Army Logistician, July 2003, 21.

H.John Poole, Tactics of the Crescent Moon: Militant Muslims Combat Methods, (Emerald Isle, Posterity Press, 2004), 144-169.

Col Xiangsui book <u>Unrestricted Warfare</u>. The Marine Corps CSS community will face threats on today's non-contiguous battlefield like in Vietnam. With the Global War on Terrorism in its infancy stages *Gun Trucks* will be required for several campaigns to come.

Since the Vietnam War the adversaries have recognized that attacking supply convoys can help defeat U.S. Forces per John Poole's book <u>Tactics of the Crescent Moon</u>. The enemy can and will engage all convoys at close range, under 30 meters, in order to maximize confusion and shock allowing the insurgents to make utmost use of their resources. The tactic of engaging U.S. Forces at close range also demonstrates the need for Gun Trucks to be armored like their Vietnam era counter parts.

During the Vietnam War the *Gun Trucks* were configured in different varieties. For instance some had quad-mounted .50 caliber machine guns (World War II era anti-aircraft weapon system) mounted on the bed of the trucks. In other instances 7.62-millimeter Gattling guns were mounted on these vehicles able to repulse many ambushes. The weapons systems that can be

<sup>&</sup>lt;sup>12</sup> Colonel Qiao Liang and Colonel Wang Xiangsui, *Unrestricted Warfare*, (Beijing: PLA Literature and Arts Publishing House, 1999)

<sup>&</sup>lt;sup>13</sup>H.John Poole, Tactics of the Crescent Moon: Militant Muslims Combat Methods, (Emerald Isle, Posterity Press, 2004)

<sup>&</sup>lt;sup>14</sup>H.John Poole, Tactics of the Crescent Moon: Militant Muslims Combat Methods, (Emerald Isle, Posterity Press, 2004), 241-242.

placed on the *Gun Truck* are endless. As well as equipping the vehicles with radios that can be used to call in air strikes and close air support similar to the forward observer/ forward air controller radio kits installed in the M1A1 Abrams main battle tank.

Installation and Logistics division of Headquarters Marine Corps like the Army is currently work on equipping HMWWV's and 7-ton trucks with protection against enemy weapon systems. 15
"Currently the Marine Corps Systems Command plans on purchasing 3,000 (MTVR) armor kits for the Medium Tactical Replacement (MTVR) truck system. "16 With a few modifications to the armor kits using existing machine gun mount cradles, the MTVRs can go from an armored cargo truck to a weapon system platform capable of protect re-supply convoys for enemy attacks.

<sup>&</sup>lt;sup>15</sup> Colonel Paul Ortiz, Marine Corps Systems Command, *Urgent UNS Process* & Equipment Support, 8-9 September 2005, Slide 16.

<sup>&</sup>lt;sup>16</sup>Colonel Paul Ortiz, Marine Corps Systems Command, *Urgent UNS Process* & Equipment Support, 8-9 September 2005, Slide 17.



(An MTVR with an armored kit

applied)

The gun trucks should not be viewed as a necessity only required for combat operations in Iraq but must be viewed as a kit that must remain in the Marine Corps inventory so as not to be re-invented again for the next conflict.

The Gun truck kits must be listed on the vehicle's Stock Listing-3 (SL-3) inventory form as an as required item and tracked under supply regulations stated in Marine Corps Order 4400.150E. The kits should be fielded based on every 10th wheeled vehicle within the MEF minus Light Armored Vehicles. This will allow all CSS units within a MAGTF, both organic and external CSS units to reply enemy ambushes. With the SL-3 listing as an as required item, will allow the unit commander decide to purchase additional kits and go from one per ten vehicles to what best fits the enemy threat situation.

<sup>&</sup>lt;sup>17</sup> Colonel Paul Ortiz, Marine Corps Systems Command, *Urgent UNS Process* & Equipment Support, 8-9 September 2005, Slide 16.



8 (An M931 power unit truck

with an M113 Armored Personnel Carrier hull mounted on the 5th wheel, currently used in Iraq)



(An M1070F Heavy Equipment

Transport power unit modified into a Gun Truck, currently used in Iraq)

<sup>18</sup>Kelsey, "Iraq Gun-Trucks" Classic Military Vehicle 16 December 2003, http://www.cmvmag.co.uk/cgi-bin/news.cgi?article=040103, 12 December 2004

<sup>&</sup>lt;sup>19</sup>Chuck Crumbo, "S.C. Soldier Designs a New Truck," The State, December 16, 2004,

http://www.thestate.com/mld/thestate/news/10427810.htm?template=contentModule s/prints..., 8 January 2005.



(A 5 Ton Modified to a Gun Truck,

Vietnam era. Note the radio mounts and brackets for communication equipment.)



<sup>21</sup> (A 5-ton truck

modified to a Gun Truck using an un-repairable M113 APC, Vietnam era)

U.S. Forces must over come many challenges to re-supply forces on the front line. Radically new techniques and concept are not needed, but pulling old ideas off the shelf like aerial delivery and *Gun Trucks*. Both Gun Trucks and aerial delivery

<sup>&</sup>lt;sup>20</sup>Paul S. Gardner, "Gun Trucks: Genuine Examples of American Ingenuity" Army Logistician, July 2003, 21.

<sup>&</sup>lt;sup>21</sup> Paul S. Gardiner, "Gun Trucks: Genuine Examples of American Ingenuity" Army Logistician, July 2003, 21

must be updated with current technologies in order to be employed insurgent war vice a traditional battlefield.

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